

DEC 03 2007

Appln. No. 10/532,894

Attorney Docket No. 10808-235

I. Amendments to the Claims

1. (Cancelled).

2. (Previously Presented): A method for fabricating a transistor structure comprising at least a first and a second bipolar transistor having different collector widths, the method comprising:

A) providing a semiconductor substrate, and

B) producing at least a first collector region of the first bipolar transistor having a first collector width and a second collector region of the second bipolar transistor having a second collector width,

wherein

a) at least a first zone of a first buried layer of a first conductivity type of the first bipolar transistor and a first zone of a second buried layer of a first or a second conductivity type of the second bipolar transistor are introduced into the semiconductor substrate,

b) a first epitaxial layer is produced, which covers, over the whole area, at least the first zones,

c) at least a second zone of the first conductivity type is produced within the first epitaxial layer, the second zone adjoining the first zone of the first buried layer,

d) a second epitaxial layer is produced, which covers, over the whole area, at least the first epitaxial layer and the second zone of the first buried layer,

d) at least one insulation region is produced which isolates at least the collector regions from one another, and

BRINKS
HOFER
GILBON
ALIONE

-2-

Appln. No. 10/532,894

Attorney Docket No. 10808-235

e) the second zone of the first buried layer adjoins the first collector region and the first zone of the second buried layer adjoins the second collector region.

3-5. (Cancelled).

6. (Currently Amended): The method as claimed in claim 1, A method for fabricating a transistor structure comprising at least a first and a second bipolar transistor having different collector widths, the method comprising:

A) providing a semiconductor substrate,

B) introducing at least a first buried layer of the first bipolar transistor and a second buried layer of the second bipolar transistor into the semiconductor substrate, and

C) producing at least a first collector region having a first collector width on the first buried layer and a second collector region having a second collector width on the second buried layer,

wherein

a) for the production of the second collector width, a first collector zone having a first thickness is produced on the second buried layer,

b) a second collector zone having a second thickness is produced on the first collector zone,

c) at least one insulation region is produced which isolates at least the collector regions from one another; and

BRINKS
HOFER
CILBON
& LIONE

-3-

Appn. No. 10/532,894

Attorney Docket No. 10808-235

wherein an insulating layer is produced between the semiconductor substrate and the buried layers.

7. (Currently Amended): The method as claimed in claim 1, A method for fabricating a transistor structure comprising at least a first and a second bipolar transistor having different collector widths, the method comprising:

A) providing a semiconductor substrate,

B) introducing at least a first buried layer of the first bipolar transistor and a second buried layer of the second bipolar transistor into the semiconductor substrate, and

C) producing at least a first collector region having a first collector width on the first buried layer and a second collector region having a second collector width on the second buried layer,

wherein

a) for the production of the second collector width, a first collector zone having a first thickness is produced on the second buried layer,

b) a second collector zone having a second thickness is produced on the first collector zone,

c) at least one insulation region is produced which isolates at least the collector regions from one another; and

wherein the insulation region is produced with the aid of shallow trench isolation technology.

BRINKS
HOFER
GILBON
SALIONE

Appn. No. 10/532,894

Attorney Docket No. 10808-235

8. (Previously Presented): The method as claimed in claim 2, wherein the second collector zone is deposited.

9. (Previously Presented): The method as claimed in claim 8, wherein the second collector zone is deposited epitaxially.

10. (Previously Presented): The method as claimed in claim 2, wherein an insulating layer is produced between the semiconductor substrate and the buried layers.

11. (Previously Presented): The method as claimed in claim 2, wherein the insulation region is produced with the aid of shallow trench isolation technology.

12-15. (Cancelled).

BRINKS
HOFER
GILBON
& LIONE